

IN THE CLAIMS

Please amend the claims as follows:

1. (currently amended) A method of manufacturing a magnetic tunnel junction device, in which a stack comprising two magnetic layers and a barrier layer extending in between is formed, one of the magnetic layers is structured by etching, in which, during etching, a part of the ~~relevant~~ structured layer is thinned by removing material until to provide a rest layer ~~remains~~, whereafter the electrical resistance of the rest layer is increased by chemical conversion.
2. (original) A method as claimed in claim 1, characterized in that the chemical conversion is effected by oxidation and/or nitridation.
3. (original) A method as claimed in claim 1, characterized in that physical etching is performed.
4. (original) A method as claimed in claim 1, characterized in that the magnetic layer to be structured is built up from, consecutively, a basic layer and a layer structure comprising at least a further layer for magnetic pinning of the basic layer.
5. (currently amended) A method as claimed in claim 3, characterized in that, the magnetic layer to be structured is built up from, consecutively, a basic layer and a layer structure, and prior to physical etching, the layer structure is chemically etched until the basic layer is reached.
6. (original) A method as claimed in claim 2, characterized in that an oxidation of the rest layer is effected by thermal oxidation, plasma oxidation or UV-assisted oxidation.

7. (original) A method as claimed in claim 2, characterized in that a nitridation of the rest layer is effected by thermal nitridation or plasma nitridation.

8. (Previously presented) A magnetic tunnel junction device obtained by means of the method as claimed in claim 1.

9. (currently amended) A magnetic tunnel junction device as claimed in claim 8, in which the magnetic layer other than the structured magnetic layer comprises a soft-magnetic layer which is usable as a flux guide.

10. (original) A magnetic field sensor provided with the magnetic tunnel junction device as claimed in claim 8.

11. (original) A magnetic field sensor as claimed in claim 9, provided with a magnetic yoke which is in magnetic contact with the soft-magnetic layer of the magnetic tunnel junction device.

12. (original) A magnetic memory provided with the magnetic tunnel junction device as claimed in claim 8.

13. (Currently amended) A method as claimed in claims 4, characterized in that, prior to physical etching, the layer structure is chemically etched until the basic layer is reached.

14. (Previously presented) The device of claim 8, characterized in that the chemical conversion is effected by oxidation and/or nitridation.

15. (Previously presented) The device of claim 8, characterized in that physical etching is performed.

16. (Previously presented) The device of claim 8, characterized in that the magnetic layer to be structured is built up from, consecutively, a basic layer and a layer structure comprising at least a further layer for magnetic pinning of the basic layer.

17. (Currently amended) The device of claim 15, characterized in that, the magnetic layer to be structured is built up from, consecutively, a basic layer and a layer structure, and prior to physical etching, the layer structure is chemically etched until the basic layer is reached.

18. (Previously presented) The device of claim 14, characterized in that an oxidation of the rest layer is effected by thermal oxidation, plasma oxidation or UV-assisted oxidation.

19. (Previously presented) The device of claim 14, characterized in that a nitridation of the rest layer is effected by thermal nitridation or plasma nitridation.

20. (Previously presented) The device of claim 16, characterized in that, prior to physical etching, the layer structure is chemically etched until the basic layer is reached.